

ABSTRACT

An optical transport network for providing broadcasting services is disclosed and includes: an OLT for receiving single-channel MPTSs from a plurality of broadcasting service providers, assigning VCIs to each of the single-channel MPTSs, converting into
5 ATM cells, and continuously transmitting optical signals according to a corresponding bandwidth; an ATM cell conversion section for converting the optical signals transmitted from the OLT into an ATM format data, dividing the ATM format data into ATM cells and outputting one broadcasting channel data from each ATM cell; a switch for switching each digital broadcasting data provided from the ATM cell conversion section to each subscriber;
10 and a control section for receiving header information in an ATM cell from the ATM cell conversion section, updating broadcasting channel information, receiving desired broadcasting channels from subscribers, and controlling the switch so that channel data outputted from the ATM cell conversion section can be corresponded to subscribers.